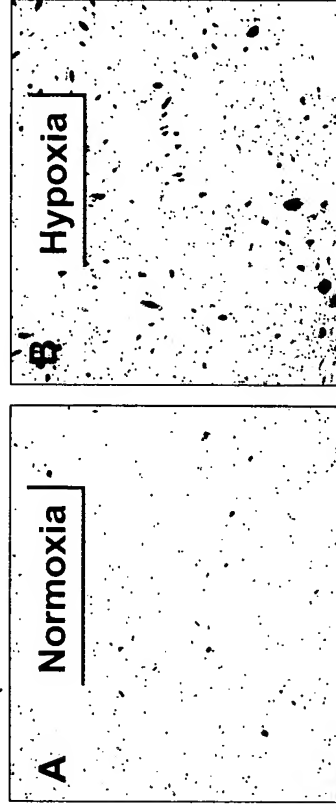


Figure 1



**Figure 2**

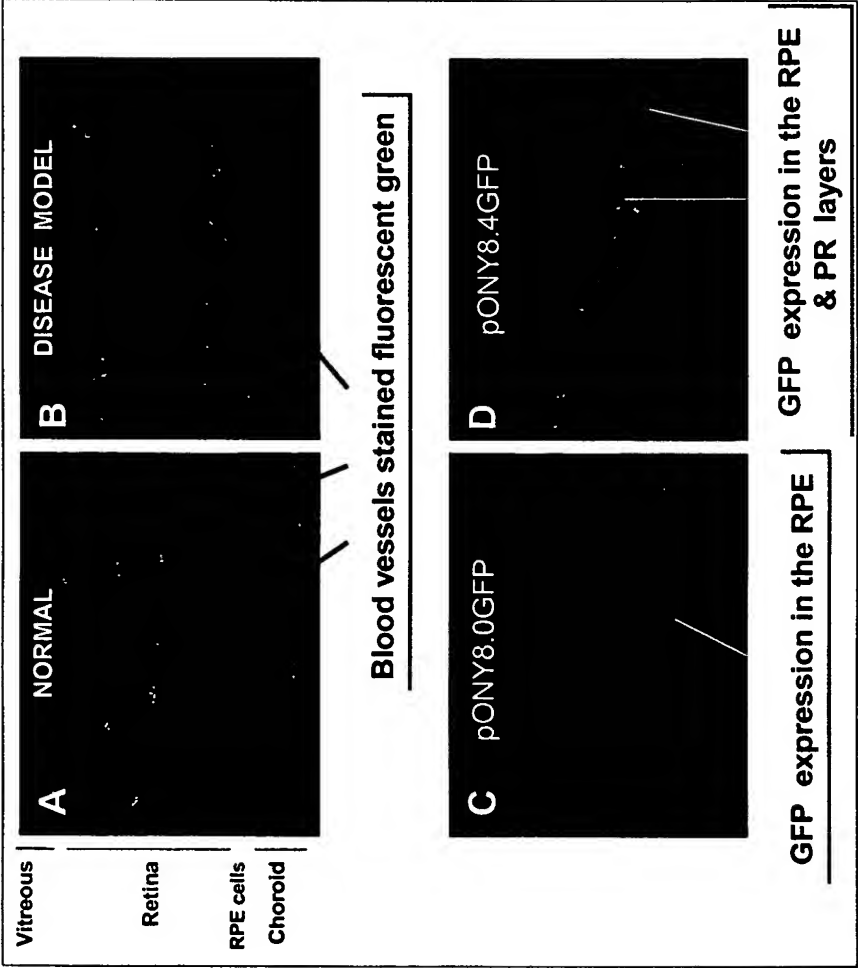


Figure 3

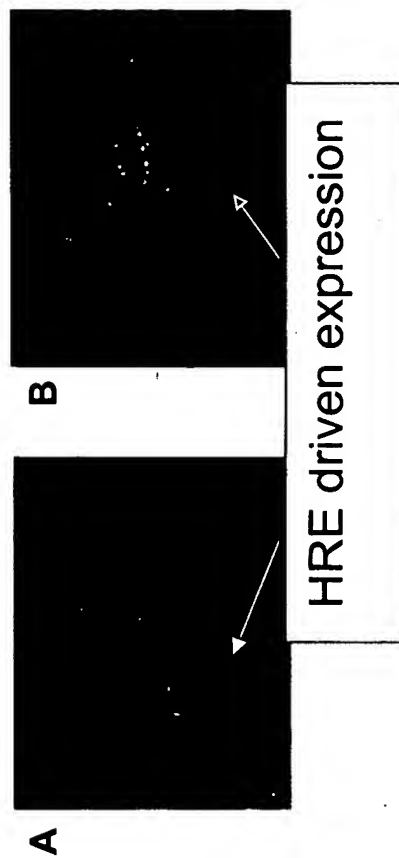


Figure 4

Codon optimized Endostatin  
Original Endostatin  
Amino Acid Sequence

ATGATGCAATGAAGAGGGCCCTGTGCTGTGCTCTCTGCTGTGGGGCGGCTCTTGTC  
ATGATGCAATGAAGAGAGGGCTCTGTGCTGTGCTGTGCTGTGGAGCAGCTCTTGTT  
M D A M K R G L C C V L L L L C G A V F V  
AGCCCAAGCGGACCGGCTCCACAGCCACCGGACTTCCAGCCCGTGTGCACCTGGTG  
TCGCCAGCGGTACCGGATCCACAGCCACCGGACTTCCAGCCCGGTGTCCACCTGGTT  
S P S G T G S H S H R D F Q P V L H L V  
GCCCTGAACAGCCCTGAGCGGGGCGCATGCGGGCATCAGGGGCGTGACTTCCAGTGC  
GGCTCAACAGCCCCCTGTCAGGGGGCATCGGGGGCATCCGCGGGGCCGACTTCCAGTGC  
A L N S P L S G G M R G I R G A D F Q C  
TTCCAGAGGCCAGGGCCGTGGGCTGGCCGGCACCTTCCGGGCTTCTGTAGCAGCCGC  
TTCCAGAGGGCGGGCCGTGGGCTGGGGGCGACCTTCCGGGCTTCTGTCTCGCGC  
F Q Q A R A V G L A G T F R A F L S S R  
CTGAGGACCTGTACAGCATCGTGGCAGGGCCGACCGGCTGCCGTGCCATCGTGAAC  
CTGAGGACCTGTACAGCATCGTGGCCCGTGGCGACCGGCGAGCCGTGCCATCGTCAAC  
L Q D L Y S I V R R A D R A A V P I V N  
CTGAGGACGAGCTGTGTTCCCGAGTGGGAGGCCCTGTTTCAGCGGCGAGGGGCCCC  
CTCAAGGACGAGCTGTGTTTCCCGAGTGGGAGGCTCTGTTCTCAGGCTCTGAGGGTCCG  
L K D E L L F P S W E A L F S G S E G P  
CTGAGCCAGGGCGCAGGATCTTCAGCTTCGACGGCAAGGACGTGTGCGCCACCCACC  
CTGAAGCCCGGGCACGCATCTTCTCTTTGACGGCAAGGACGTCTGAGGCACCCACC  
L K P G A R I F S F D G K D V L R H P T  
TGGCCCCAGAAGAGCGTGTGGCACGGCTCCGACCCCAACGGCCGAGGCTGACCCGAGAGC  
TGGCCCCAGAAGAGCGTGTGGCATGGCTCGGACCCCAACGGCGCAGGCTGACCCGAGAGC  
W P Q K S V W H G S D P N G R R L T E S  
TACTGCGAGACCTGGCGCACCGAGGCCCCCAGCGCCACCGGGCAGGCCAGCTCCCTGCTG  
TACTGTGAGACGTGGCGGACCGAGGCTCCCTCGGCCACGGGCCAGGCCCTCTCGCTGCTG  
Y C E T W R T E A P S A T G Q A S S L L  
GGCGGACGGCTGTGGCCAGAGCGCGCCAGCTGCCACCCAGCCCTACATCGTGTGTGC  
GGGGGCAGGCTCTGGGGCAGAGTGGCGGAGCTGCCATCAGCCCTACATCGTGTGTGC  
G G R L L G Q S A A S C H H A Y I V L C  
ATCGAGAACAGCTTCATGACCGCCAGCAAGTA  
ATTGAGAACAGCTTCATGACTGCCTCCAAGTAG  
I E N S F M T A S K \*

Figure 5

ATGATGCTATGAAGCGGGCTGTGTTCCTCTCTGTGCGGCGCTGTGTTTGTG  
ATGATGCAATGAAGAGGGCTCTGCTGTGCTGCTGTGAGCAGTCTTCGTT  
M D A M K R G L C C V L L L C G A V F V  
TCGCTCCGGCACCGGAGCTGTTGAGAAGAAGGTGTACTGACGAGTGAAGAC  
TCCGCCAGGGTACCGGCTCTATTGAAAAGAAAGTGTATCTCTCAGAGTGAAGACT  
S P S G T G S L F E K K V Y L S E C K T  
GGCAACGGCAAGAACTACAGGGGCAACCATGAGCAAGAACCAAGAACGGCATCACTCCGACG  
GGGAATGGAAGAAGAACTACAGAGGAGCAGATGTCCAAACAAAATAATGGCATCATCGTGTCAA  
G N G K N Y R G T M S K A T C K A T C T C Q  
AAGTGGAGCAGCACCGACCCCAAGGCTCGCTTACGCCCGCCACCCACCCAGCGAG  
AAATGGAGTTCCACTTCTCCCAAGACAGCTAGATTCTACCTGTACACACCCCTCAGAG  
K W S S T S P H R P R F S P A A T C T H P S S E  
GGCTTGGAGGAGAATCTACTGCGCAACCCGCAACGACCCAGCCAGGCCCTGTGCTGCTA  
GGACTGGAGGAGAATCTACTGCGGAATCCAGACAAACGATCCGAGGGGCCCTGTGCTGTAT  
G L E E N Y C R N P D N D P Q G P W C Y  
ACCACGACCTGAGAAGCGCTAGCACTACTGCGACATCTCTGGAGTGCAGGAAGAGTGT  
ACTACTGATCCAGAAAAGAGATATGACTACTTGGACATCTTCTGGTGTGAAGAGGAATGT  
T T D P E K R Y D Y C D I L E C E E C  
ATGCACTGCAGCGGGAGAACTACGACGCAAGATCAGAACACATGAGCGGCCTGGAG  
ATGCATTGCAATGGAGAAAATACTATGACGGCAAAATTTCAAAGACCATGTCTGGACTGGAA  
M H C S G E N Y D G K I S K T M S G G L E  
TGCCAGGCTTGGACTCCAGAGCCCGACCGCTACGCTACATCCCGACAGATTCCCA  
TGCCAGCTTGGACTCTCAGAGCCCAACGCTCATGGATACATCTTCCAAATTTCCCA  
C Q A W D S Q S P H A H G Y I P S K F P  
AACAGAACTTGAAGAAGAACTATTGTCCGAATTCGACCGCGAGCTGCGCCCTGTGTC  
AACAGAACTTGAAGAAGAAATTAATGTCGTAAACCCGATAGGAGCTGCGGCTGTGCT  
N K N L K K N Y C R N P D R E E L R L R P W C  
TTTACCACCGATCCCAACAGCGCTGGGAGCTGTGCGACATCCCGCTGCACACCCCT  
TTTACCACCGATCCCAACAGCGCTGGGAACTTTGCGACATCCCGCTGTGCAACACCT  
F T T D P N K R W E L C D I P R C T T P  
CCACCAGCAGCGGCCCTACCTACAGTGTCTGAAGGCAACCGGAGAAATTAACCGGG  
CCACCATCTTCTGTCTCCACTACAGTGTCTGAAGGAAACAGGTGAAGAAATTAACCGGG  
P P S S G P T Y Q C L K G T G E N Y R G  
AACGTGCGGTGACCGTGAAGCGGCACACTGCGAGCACTGGAGCGCCAGACCCCAAC  
AATGTGCTGTACCGTGTCCGGGCACACCTGTGACGACTGGAGTGCAGACACCCCTCAC  
N V A V T V S G H T C Q H W S A Q T P H  
ACCACAAACCGCACCCCGAGAACTTCCCTTCGCAAACTCTGACGAGAAATTAATTCGGC  
ACACATAACGAGACACAGAAAACCTTCCCTGCAAAAATTTGGATGAAAACCTACTCGCCG  
T H N R T P E N P C K N L D E N Y C R  
AACCTGACGGCAAGAGGCCCTCTGTGCGCACACCAACCAACGAGCTGCGTGGAG  
AATCTGACGGAAGAAAGGGCCCATGGTGCCATACAAACCAACGCAAGTGCCTGGAGG  
N P D G K R A P P W C H T T N S Q V R W E  
TACTGCAAGTCCCGTGGCAGCAGCGCCCGTGAAGCAACGAGCTGGCCCAACCC  
TACTGTAAGATACCGTCTGTGACTCTCTCCAGTATCCAGGAACAAATGGCTCCCAAC  
Y C K I P S C D S S P V S T E Q L A P T  
GCCCTCCCTGA  
GCACACCTTA  
A P P \*

## Figure 6



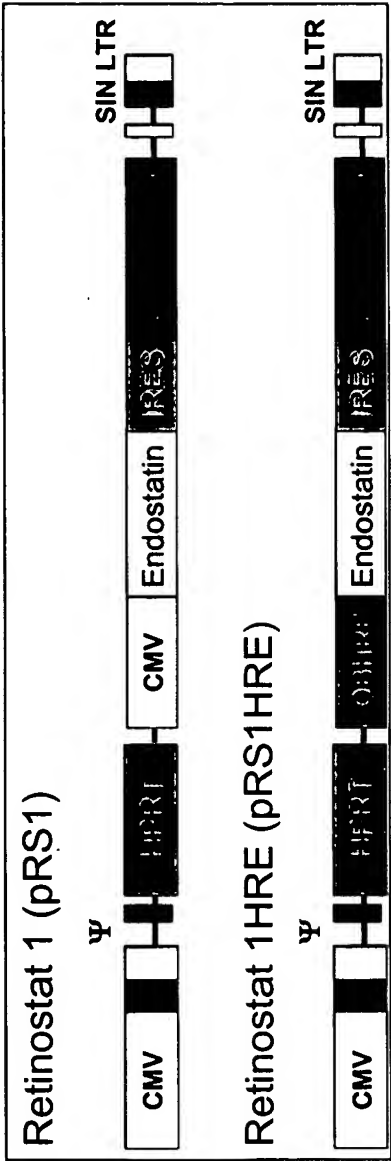
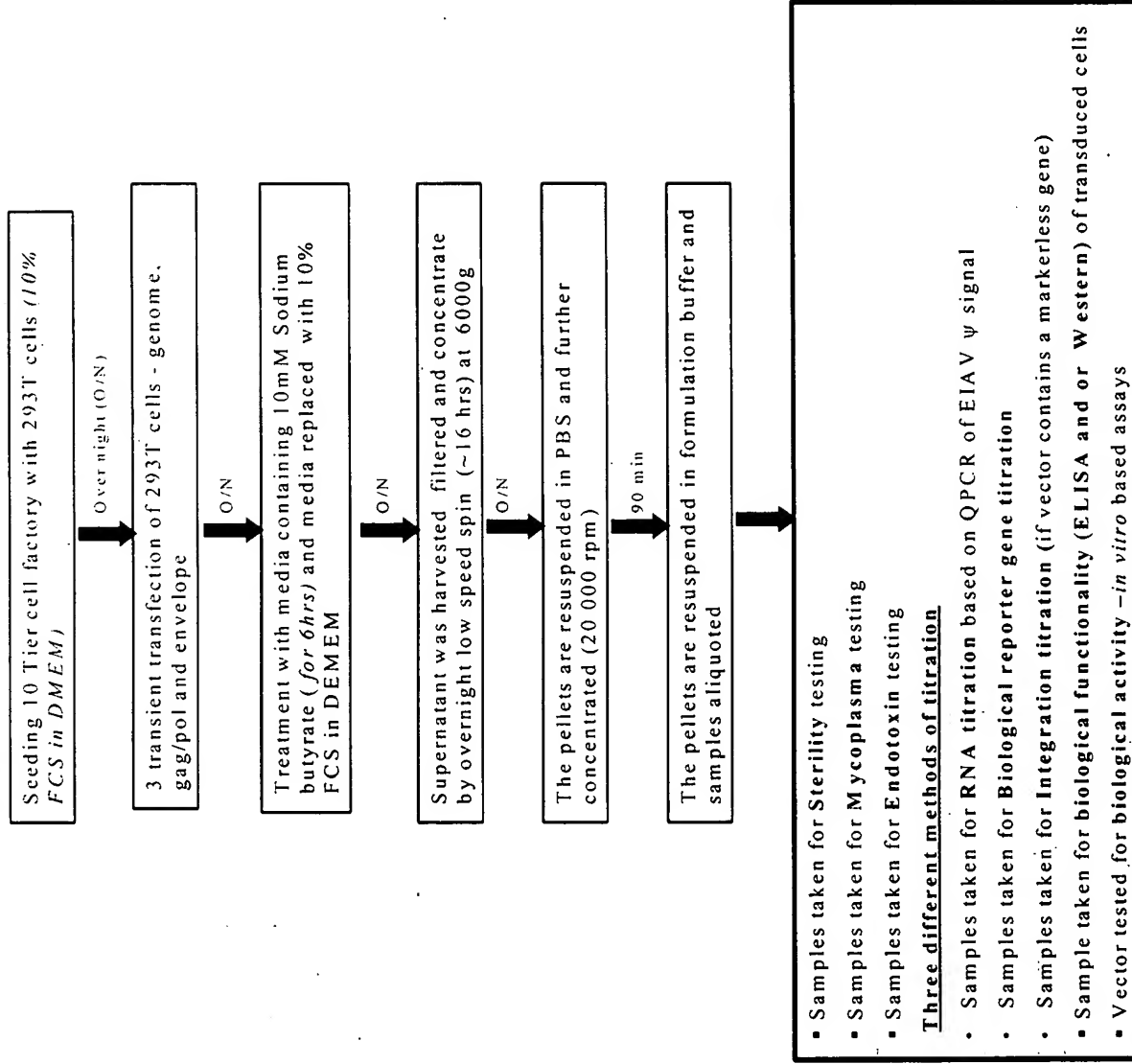


Figure 8



## EIAV Lentiviral Vector Production



**Figure 9**